



**India Meteorological Department
(Ministry of Earth Sciences)**

BULLETIN NO. 11 (BOB/07/2022)

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Subject: Cyclonic Storm "SITRANG" (pronounced as "Si-Trang") over westcentral & adjoining eastcentral Bay of Bengal (Cyclone Warning for West Bengal coast: Orange Message)

The cyclonic storm "SITRANG" pronounced as "Si-Trang" over westcentral & adjoining eastcentral Bay of Bengal moved north-northeastwards with a speed of 12 kmph during past 06 hours and lay centered at 0230 hours IST of today, the 24th October over the same region near latitude 17.2^oN and longitude 88.4^oE, about 770 km northwest of Port Blair, 500 km south of Sagar Island and 650 km south-southwest of Barisal (Bangladesh).

It is very likely to continue to move north-northeastwards and intensify further into a severe cyclonic storm during next 12 hours. Continuing to move north-northeastwards thereafter, it is very likely to cross Bangladesh coast between Tinkona Island and Sandwip close to Barisal around 25th October early morning.

Forecast track and intensity are given below:

Date/Time(IST)	Position (Lat. °N/ long. °E)	Maximum sustained surface wind speed (Kmph)	Category of cyclonic disturbance
24.10.22/0230	17.2/88.4	70-80 gusting to 90	Cyclonic Storm
24.10.22/0530	17.9/88.7	75-85 gusting to 95	Cyclonic Storm
24.10.22/1130	19.4/89.1	85-95 gusting to 105	Severe Cyclonic Storm
24.10.22/1730	20.7/89.7	90-100 gusting to 110	Severe Cyclonic Storm
24.10.22/2330	21.4/90.1	85-95 gusting to 105	Severe Cyclonic Storm
25.10.22/1130	23.0/91.0	50-60 gusting to 70	Deep Depression
25.10.22/2330	24.7/92.1	25-35 gusting to 45	Well Marked Low Pressure Area

Warnings:

(i) Rainfall (warning graphics enclosed)

Odisha: Light to moderate rainfall at many places with isolated **heavy rainfall** likely over coastal districts of Odisha on 24th and isolated **heavy rainfall** over north coastal Odisha districts on 25th October.

West Bengal: Light to moderate rainfall at most places with isolated **heavy to very heavy rainfall** likely over coastal districts of West Bengal (South & North Parganas, East & adjoining West Medinipur) on 24th October. Light to moderate rainfall at many with isolated **heavy to very heavy rainfall** likely over coastal districts (South & North Parganas and Nadia) of West Bengal on 25th October.

Northeastern States:

Light to moderate rainfall at most places with **heavy to very heavy rainfall** at isolated places likely over north Assam, Arunachal Pradesh, Nagaland & Manipur; **heavy to Extremely heavy rainfall** likely over South Assam, East Meghalaya, Mizoram, & Tripura on 24th October.

Light to moderate rainfall at most places with isolated **heavy to very heavy rainfall** likely over the same region on 25th and isolated **heavy rainfall** likely over Arunachal Pradesh, northeast Assam and Nagaland on 26th October.

(ii) Wind warning:

24th October: Gale wind speed reaching 70-80 kmph gusting to 90 kmph prevailing over westcentral & adjoining eastcentral Bay of Bengal and north Bay of Bengal. It would gradually increase becoming 80-90 kmph gusting to 100 kmph over westcentral & adjoining eastcentral Bay of Bengal and north Bay of Bengal from the morning hours. It would further increase gradually becoming 90-100 kmph gusting to 110 kmph over the same region from 24th evening till 25th morning.

Squally wind speed reaching 40-50 kmph gusting to 60 kmph prevailing along & off Odisha and West Bengal coasts. It would gradually increase becoming 60-80 kmph gusting to 90 kmph along and off West Bengal coast and 50-60 kmph gusting to 70 kmph along and off north Odisha coast from the evening hours. Squally wind speed reaching 40-50 kmph gusting to 60 kmph is likely over Mizoram & Tripura.

25th October: Gale wind speed reaching 85-95 kmph gusting to 105 kmph is likely over north Bay of Bengal and along & off Bangladesh coast; 70-90 kmph gusting to 100 kmph likely along & off 24 Parganas District and 60-70 kmph gusting to 80 kmph along & off east Medinipur

district off West Bengal coast till morning. It would gradually decrease becoming 45-55 kmph gusting to 65 kmph over coastal areas of Bangladesh after evening.

Squally wind speed reaching 45-55 gusting to 65 kmph is likely along and off Balasore district & 40-50 kmph gusting to 60 kmph along & off remaining north coastal districts of Odisha in the morning.

Squally wind speed reaching 50-60 kmph gusting to 70 kmph is likely over Tripura and 45-55 kmph gusting to 65 kmph is likely over Mizoram, south Assam and adjoining east Meghalaya & Manipur.

(iii) Sea condition

24th October: High over westcentral & adjoining eastcentral Bay of Bengal and north Bay of Bengal; **Rough to very rough** along & off Odisha-West Bengal-Bangladesh coasts and would become **high to very high** from 24th evening along and off West Bengal-Bangladesh coasts.

25th October: High to very high over north Bay of Bengal along & off Bangladesh-West Bengal coasts in the morning and improve gradually from noon.

(iv) Storm Surge Warning (warning graphics enclosed)

(i) Tidal wave of about 2.0 m height above astronomical tide is likely to inundate low lying areas of Bangladesh coast near the landfall area around the time of landfall.

(ii) Tidal wave of about 1.0 m height above astronomical tide is likely to inundate low lying areas of West Bengal (North & South 24 Parganas) around the time of landfall.

(v) Fishermen Warning (warning graphics enclosed)

Fishermen are advised not to venture into central Bay of Bengal on 24th, north & adjoining central Bay of Bengal on 24th and 25th October, 2022.

Fishermen are advised not to venture into Sea along and off Odisha, West Bengal & Bangladesh coasts during 24th to 25th October. Fishermen out at sea are advised to return to the coast.

(vi) Damage expected over coastal districts of West Bengal (South and North 24 Parganas and East Mednipur)

- Damage to thatched huts.
- Damage to power and communication lines due to breaking of branches.
- Major damage to Kutcha and minor damage to Pucca roads.
- Damage to paddy crops, banana, papaya trees and orchards.
- Sea water inundation in low lying areas after erosion of Kutcha embankments

(vii) Damage expected over Tripura, Mizoram, East Meghalaya, Manipur and South Assam

- Damage to standing crops including agricultural and horticultural crops due to heavy rain and squally winds
- Breaking of tree branches and uprooting of small trees like drumsticks, banana and papaya trees
- Inundation/localized flooding in low lying areas due to heavy rains
- Localised landslides/ mudslides/ mud slips/ mud sink possibility due to heavy rain
- Traffic may be disrupted due to poor visibility in association with heavy rain
- Vulnerable structures like hoardings, tents and display boards may be damaged

(viii) Action suggested for West Bengal

- Total suspension of fishing operations.
- People to remain in safe places.

(ix) Action suggested for Tripura, Mizoram, East Meghalaya, Manipur and South Assam

- People are advised to be cautious while going outside
- Regulate traffic
- People should not move nearby to vulnerable structures

(viii) Advisory for On-shore and Off-shore Installations

Regulation of off-shore activities from 24th over central and North Bay of Bengal till 25th. Suspension of off-shore activities during 24th to 25th October along and off Odisha and West Bengal coasts.

The system is under continuous surveillance and the next message will be issued at 0830 hours IST of today, the 24th October, 2022.

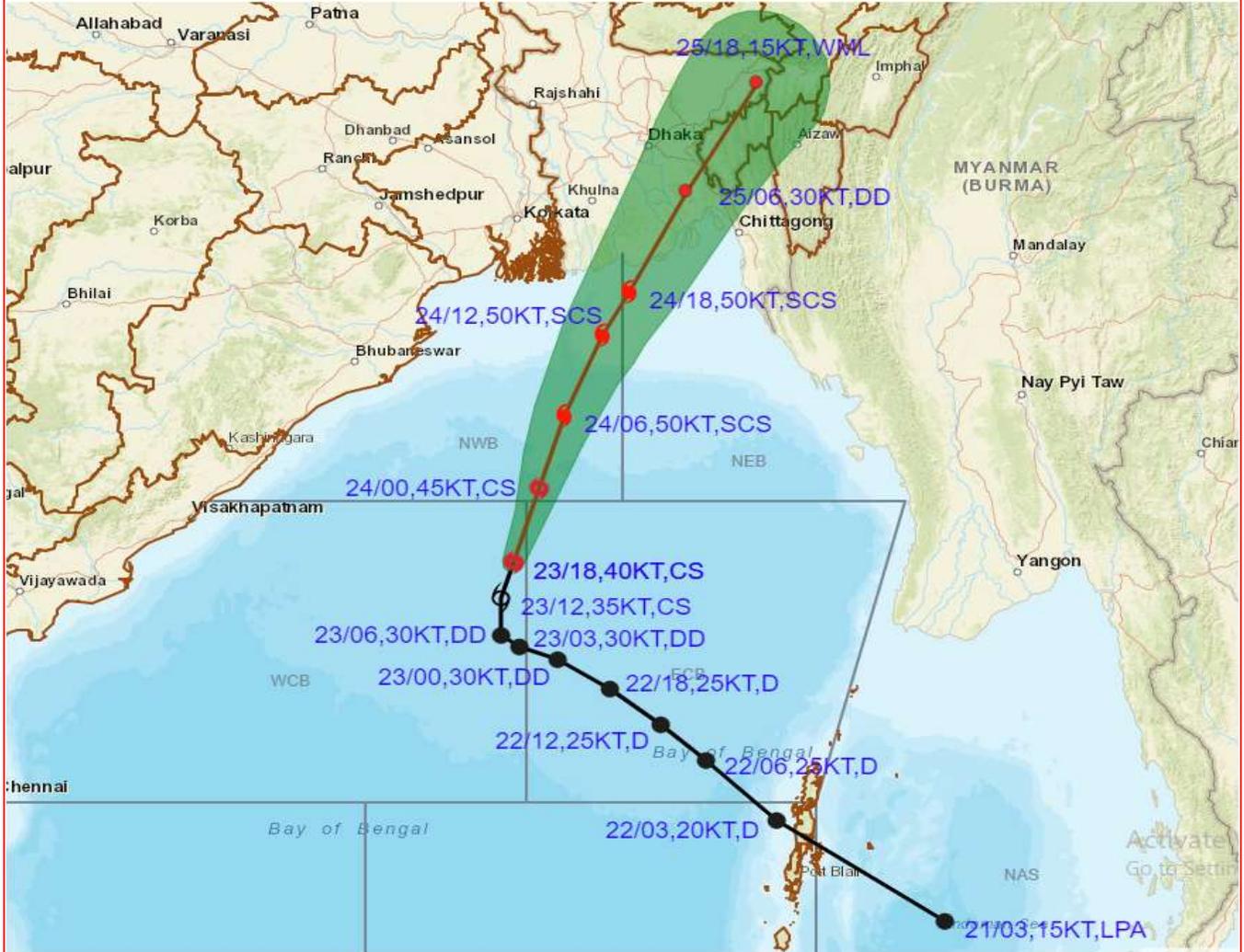
(Krishna Mishra)
Scientist- C, Cyclone Warning Division, New Delhi

Copy to: ACWC Kolkata/ ACWC Chennai/ CWC Bhubaneswar/CWCVisakhapatnam/MO Port Blair

LEGEND: Heavy Rainfall: 64.5 to 115.5mm, **Very Heavy Rainfall:** 115.6 to 204.4mm **Most Places:** more than 76% of total stations, **Isolated Places:** Less than 25% of total



OBSERVED AND FORECAST TRACK ALONGWITH CONE OF UNCERTAINTY OF CYCLONIC STORM SITRANG OVER WESTCENTRAL AND ADJOINING EASTCENTRAL BAY OF BENGAL BASED ON 1800 UTC OF 23rd OCTOBER, 2022

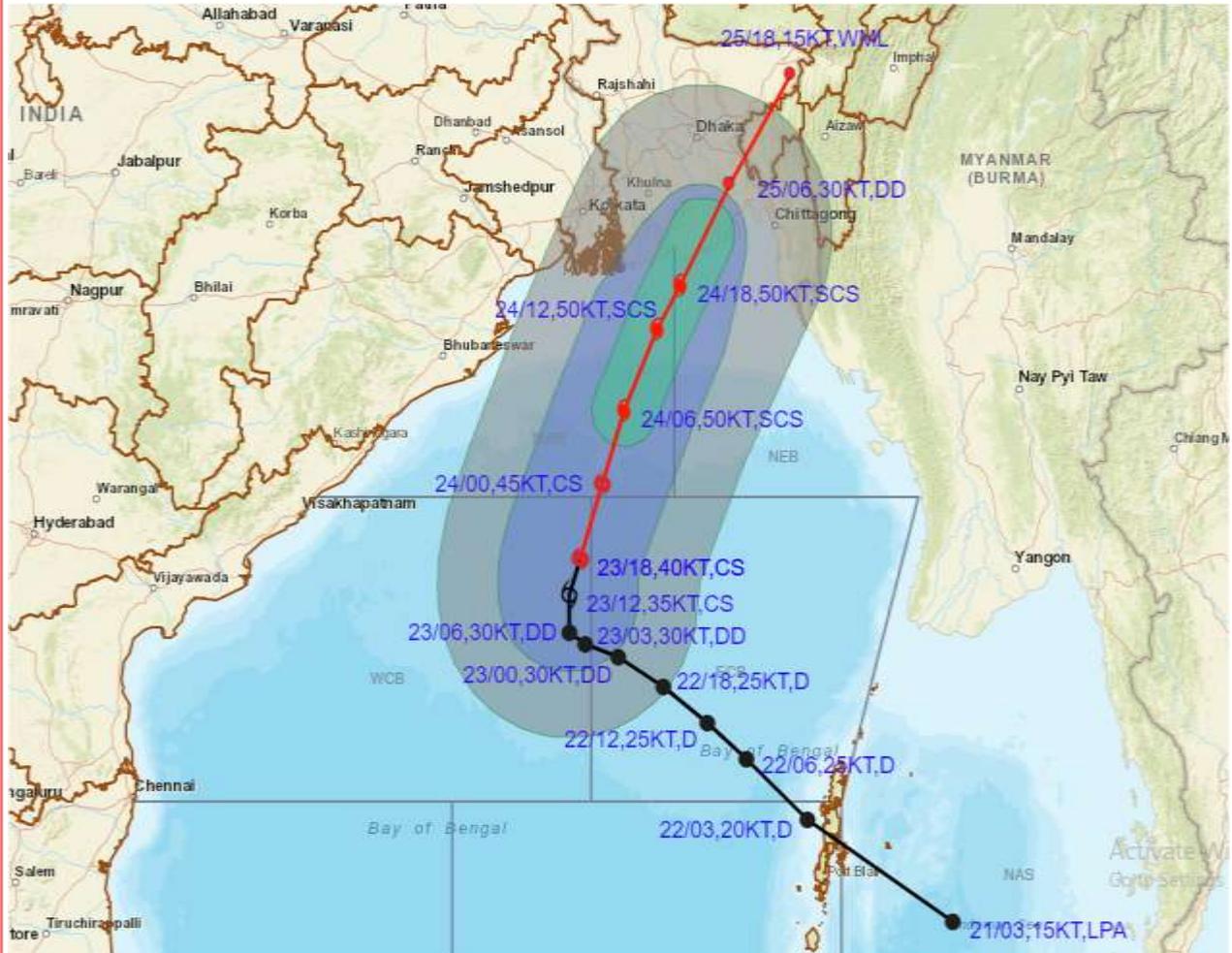


DATE/TIME IN UTC
 IST=UTC + 0530
 L: LOW PRESSURE AREA
 WML: WELL MARKED LOW PRESSURE AREA
 D: DEPRESSION (17-27 KT)
 DD: DEEP DEPRESSION (28-33 KT)
 CS: CYCLONIC STORM (34-47 KT)
 SCS: SEVERE CYCLONIC STORM (48-63KT)
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
 ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
 SuCS: SUPER CYCLONIC STORM (\geq 120 KT)

-  LESS THAN 34 KT
-  34-47 KT
-  \geq 48 KT
-  OBSERVED TRACK
-  FORECAST TRACK
-  CONE OF UNCERTAINTY



OBSERVED AND FORECAST TRACK ALONGWITH QUADRANT WIND DISTRIBUTION OF CYCLONIC STORM SITRANG OVER WESTCENTRAL AND ADJOINING EASTCENTRAL BAY OF BENGAL BASED ON 1800 UTC OF 23rd OCTOBER, 2022



DATE/TIME IN UTC
 IST=UTC + 0530
 L: LOW PRESSURE AREA
 WML: WELL MARKED LOW PRESSURE AREA
 D: DEPRESSION (17-27 KT)
 DD: DEEP DEPRESSION (28-33 KT)
 CS: CYCLONIC STORM (34-47 KT)
 SCS: SEVERE CYCLONIC STORM (48-63KT)
 VSCS: VERY SEVERE CYCLONIC STORM (64-89 KT)
 ESCS: EXTREMELY SEVERE CYCLONIC STORM (90-119 KT)
 SuCS: SUPER CYCLONIC STORM (≥20 KT)

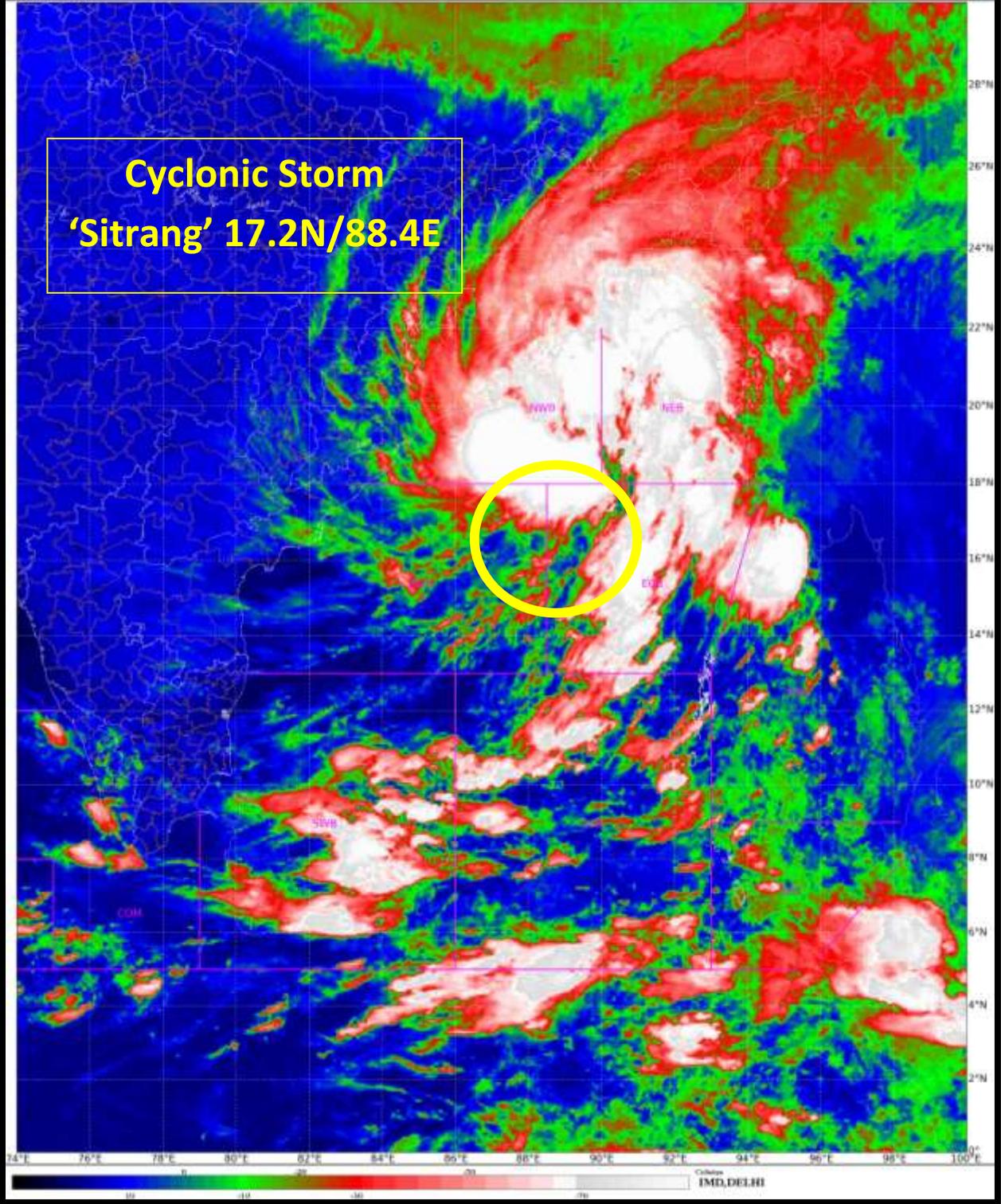
● LESS THAN 34 KT
 ○ 34-47 KT
 ● ≥ 48 KT
 — OBSERVED TRACK
 — FORECAST TRACK
 ● CONE OF UNCERTAINTY
 AREA OF MAXIMUM SUSTAINED WIND SPEED:
 ■ 28-33 KT (52-61 KMPH)
 ■ 34-49 KT (62-91 KMPH)
 ■ 50-63 KT (92-117 KMPH)
 ■ ≥ 64 KT (≥118 KMPH)

IMPACT OVER THE SEA

MSW (knot/kmph)	Impact	Action
28-33 (52-61)	Very rough seas	Total suspension of fishing operations
34-49 (62-91)	High to very high seas	Total suspension of fishing operations
50-63 (92-117)	Very high seas	Total suspension of fishing operations
≥ 64 (≥118)	Phenomenal	Total suspension of fishing operations



**Cyclonic Storm
'Sitrang' 17.2N/88.4E**



Today
23/10/2022



Tomorrow
24/10/2022



25/10/2022



26/10/2022



27/10/2022



 Heavy Rain	 Heavy Snow	 Thunderstorm	 Dust Storm
 Strong Winds	 Visibility	 Cyclone	 Squall/ Ha
 Frost	 Cold Wave	 Heat Wave	 Sea State

Fishermen warning graphics

Day 1: 23.10.2022/11:30AM to 24.10.2022/05:30AM



Day 2: 24.10.2022/05:30AM to 25.10.2022/05:30AM



Day 3: 25.10.2022/05:30AM to 26.10.2022/05:30AM



Day 4: 26.10.2022/05:30AM to 27.10.2022/05:30AM

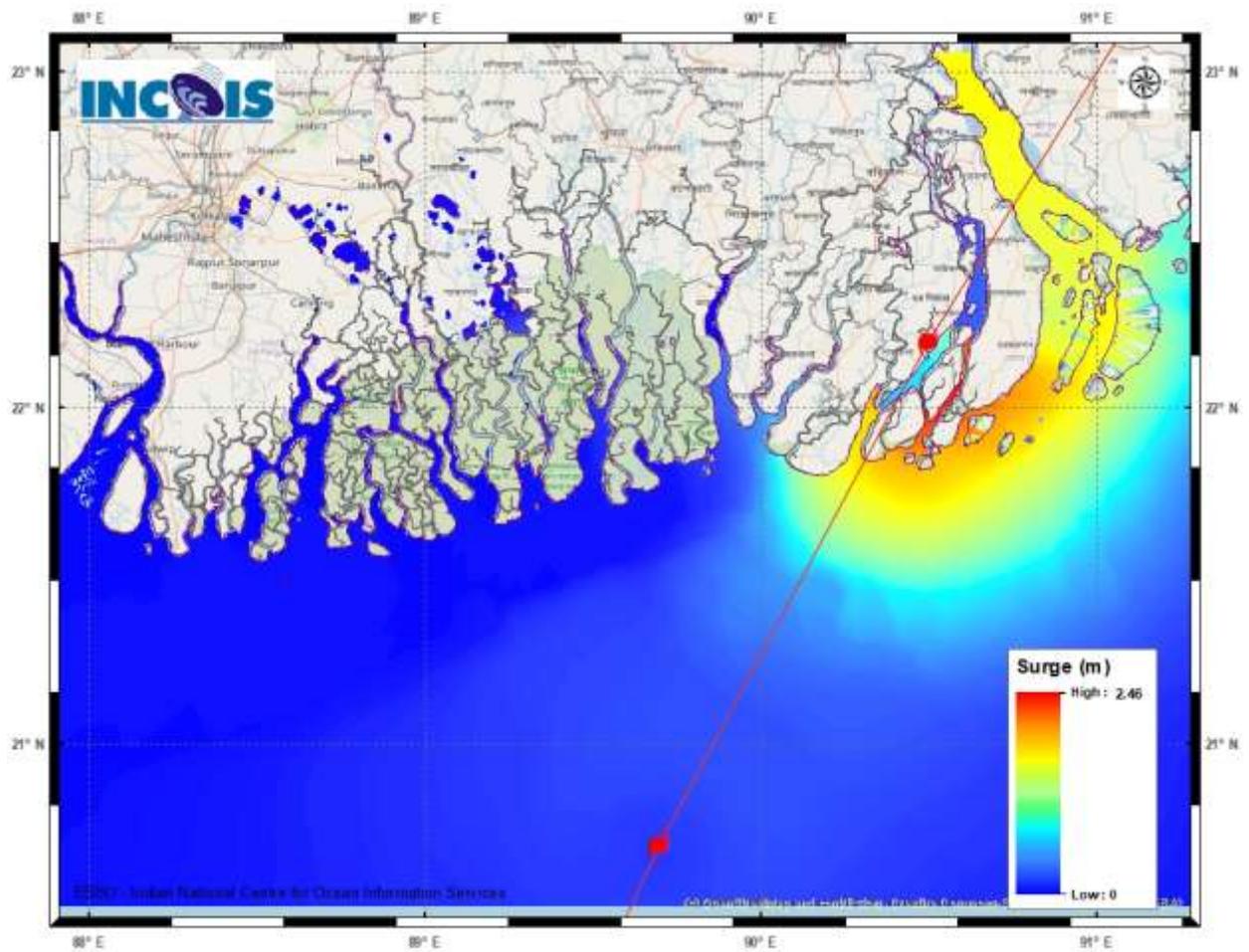


Day 5: 27.10.2022/05:30AM to 28.10.2022/05:30AM



	Squally WX with wind speed 40-45 kmph gusting to 55 kmph
	Squally WX with wind speed 45-55 kmph gusting to 65 kmph
	Squally wind speed with wind speed 45-55 kmph gusting to 65 kmph
	Squally wind speed with wind speed 55-65 kmph gusting to 75 kmph
	Gale wind speed with wind speed 65-75 kmph gusting to 85 kmph
	Gale wind speed with wind speed 80-90 kmph gusting to 100 kmph
	Gale wind speed with wind speed 90-100 kmph gusting to 110 kmph

Fishermen are advised not to venture into the marked areas.



Storm Surge Warning Graphics